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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,855

09/23/2005

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4074-20

4776

23117 7590 07/19/2010
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EXAMINER

PAYER, PAUL F

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

07/19/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,855	Applicant(s) YAMANAKA, TOSHIHIRO	
	Examiner PAUL F. PAYER	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on 5/3/2010 has been entered. Applicant amends claims 6, 7 and 18.

Response to Arguments

2. Applicant's arguments with respect to amended **claim 6** have been considered but are not persuasive. On pages 11-13 Applicant reviews misc. features of the invention then, in the last paragraph on page 13 and first paragraph on page 14 argues that Kawabuchi's device a) does not perform print job invalidation every time on auto power-off (on auto power-off, print job data is cleared only when the power is restored manually or when a set time has passed between power-off and power restoration irrespective of power-on mode) and b) performs power invalidation every time on manual power-off and concludes on page 14 that Kawabuchi et al. does not disclose some of the features of the amended claim and further Shimizu fails to cure the deficiency of Kawabuchi.

The Examiner disagrees and notes that Kawabuchi et al. and Shimizu in combination disclose all limitation of claim 1. In particular, as explained in more detail below, the Shimizu's security mode associated with print jobs corresponds to the newly added "setting about availability to make the invalidating unit operable".

Claim Rejections - 35 USC § 112, Second Paragraph

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1, 7 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 1, 7 and 18 recite “an operation admission unit that *makes settings about availability to make* the invalidating unit operable...”. The exact meaning of this limitation is not clear. For the purpose of examination, the limitation is assumed to require the operation admission unit using a setting which determines whether the processing contents data should be invalidated or not.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 6-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawabuchi et al. (U.S. 5,884,122) and Shimizu (U.S. 2004/0012812).**

Regarding claim 6 (Currently Amended), **claim 7** (Currently Amended) and **claim 18** (Currently Amended), Kawabuchi et al. discloses an information processing apparatus (column 1/lines 5-6), comprising:

a power switch for activating the information processing apparatus (column 2/lines 26-29, the printer has a power switch used for manual shut down and power up), comprising;

a receiving unit that receives an instruction for turning off the power switch (Fig. 3, 9 and column 7/lines 60-65 and column 8/lines 35-37; the Controller 300, which corresponds to the receiving unit, receives and processes the auto-shut-off command);

a storage unit that stores data to be processed (Fig. 3 and column 5/lines 3-11; image memory 401 stores print data, corresponding to “data to be processed”);

a management record unit that records processing contents data (Fig. 3 and column 5/lines 26-29, the RAM 402 corresponds to the “management record unit”; it stores print job data or “processing contents data”);

a control unit that controls to carry out information processing, based on the processing contents data recorded in the management record unit, about the data to be processed stored in the storage unit (Fig. 3, the controller 300 controls the printing function; it prints the print data stored in image memory 401 based on the print job data stored in the RAM 402);

a resuming unit that resumes, when the information processing is temporarily stopped and resumed, the information processing based on the processing contents data which is not changed between pre- and post- resuming (column 2/lines 30-34, if the power supply was turned off with the auto-power-off function and turned on automatically, the device restores the operation state to that before the power off and resumes regular operation);

an invalidating unit that invalidates the processing contents data recorded in the management record unit (column 2/lines 34-38; if the power supply, having been turned off with the auto power-off function, is turned on manually, the print job data is erased; this corresponds to invalidating the processing contents data recorded in the management record unit; controller 300 erases the print job data and corresponds to the claimed invalidating unit);

a limiting unit that limits, when the power switch is turned off and **the invalidating unit is operable**, the operation of the resuming unit, wherein the information processing is resumed after deleting a part or all of the processing contents data recorded in the management record unit (column 2/lines 34-38; if the power supply, having been turned off with the auto power-off function, is turned on manually, the print job data is erased; printing cannot resume, which corresponds to limiting the operation of the resuming unit), wherein

the limitation performed by the limiting unit is prevented when the power switch is turned off and **the invalidating unit is not operable** (column 2/lines 31-34; if the power supply was turned off with the auto power-off function, the print job data is not erased; this corresponds to preventing the limiting unit, i.e., restoring the device state before the power switch was turned off and resuming the regular printing operation) and

if the storage unit successively stores the data to be processed, the control unit controls to carry out successive information processing about data to be processed having already stored in the storage unit (Fig. 3, corresponding to the common mode of operation of a copier, data is scanned by image reader 100, stored in image memory

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401 and then printed by printer 200 under the control of controller 300; data is “successively” stored in image memory 401 and print data stored in image memory 401 is “successively” printed).

Kawabuchi et al. does not explicitly disclose an operation admission unit to cause the invalidation unit to invalidate processing contents data (i.e., print job data) for which information processing (i.e., printing) has been carried out.

However, deleting print job information for a print job, particularly a secure print job, after the job has been printed is common in the art. For example, Shimizu teaches specifying a data erasure mode for each print job and executing a data erasure process after a print job was printed based on the data erasure mode assigned to the print job (Fig. 2 and [0009], after a print job is printed at step S203, a data erasure process is executed on the print job at step S206).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have modified Kawabuchi et al.’s printing system by deleted print job information for a print job, particularly a secure print job, after the print job was printed in order to free memory for use by other print jobs and minimize the likelihood that print data for confidential print jobs that were executed be read by unauthorized users.

It would have been further obvious for the ordinary artisan to modify Kawabuchi et al.’s printer resume function in the case of a temporary interruption by selectively backing up in non-volatile RAM, prior to power-down, only print job data associated with normal print jobs. Doing so would insure that normal print jobs would be backed up and

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automatically restored for user convenience (the user would not need to re-enter the print job information) while secure print jobs would not be backed up and could not be restored and viewed by unauthorized users avoiding a security issue and this solution would address the tradeoff between convenience and security considered by Kawabuchi et al. at column 1/lines 42-62) and Shimizu at paragraph [0006].

Related to the relevant limitations of amended claim 1, the combined Kawabuchi et al. and Shimizu printing system teaches:

an operation admission unit that uses a setting which determines whether the invalidating unit is operable so that after the information processing is carried out, the invalidating unit invalidates the processing contents data representing processing contents data for which the information processing has been carried out (Shimizu, Fig. 2 and [0092], after a print job is printed at step S203, the security mode of the print job is checked at step S204 and a data erasure process is executed on the print job at step S206; the security mode corresponds to the setting to be maintained by the operation admission unit);

a decision unit that decides in response to the reception of the instruction by the receiving unit whether the invalidating unit is allowed to invalidate or not, on the basis of the setting of the operation admission unit (Kawabuchi et al., Fig. 9/item S71-S72, Fig. 10/items S103-S105 and column 7/lines 60-65 and column 8/lines 35-37 and Shimizu, Fig. 2 and [0092]; in the context of the combined Kawabuchi et al. and Shimizu system, upon receipt of an auto-shut-off command at step S71 of Fig. 9, only non-secure print job data is backed up in non-volatile memory at step S104 of Fig. 10; Shimizu Fig. 2's

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steps S204 and S206 show how the mode is determined and executing and erasure based on the outcome of the determination; it is noted that in the case of the combined system, security is ensured by not backing up the secure data rather than deleting/erasing secure data which is already backed up);

when the receiving unit receives the instruction, the invalidation unit performs the invalidation or not on the basis of the decision result by the decision unit and the power switch is turned off (Kawabuchi et al., Fig. 9; the auto-shut-off instruction is received at step S71 and the power switch is turned off at step S74);

Regarding claim 8 (dependent on claim 6, Previously Presented) and **claim 9** (dependent on claim 7, Previously Presented), Kawabuchi et al. and Shimizu disclose the information processing apparatus backing up the print job data from RAM to non-volatile memory during the power down and restoring the print job data into RAM on power up (Kawabuchi et al., column 2/lines 30-34, if the power supply was turned off with the auto-power-off function and turned on automatically, the device restores the operation state to that before the power off (in restores in particular the print data and print job data) and resumes regular operation). While not explicitly disclosed, maintaining a location of where in backup memory the print job data is stored is required for the print job data to be able to be restored.

Regarding claim 10 (dependent on claim 6, Previously Presented), **claim 11** (dependent on claim 7, Previously Presented), **claim 12** (dependent on claim 8, Previously Presented) and **claim 13** (dependent on claim 9, Previously Presented), Kawabuchi et al. and Shimizu disclose:

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the process contents data comprises data to be processed and associated information associated with the data (Kawabuchi et al., column 5/lines 3-10; print/image data is stored in image memory 401 and print job data (which include, among other data elements, number of copies, paper size, etc.) associated with the image/print data is stored in RAM 402, and

the limiting unit is structured so as to resume the information processing after all of the processing contents data is deleted from the management record unit (Kawabuchi et al., column 2/lines 34-38; if the power supply is turned on manually, the print job data is erased; this corresponds to invalidating the processing contents data recorded in the management record unit).

Regarding claim 14 (dependent on claim 10, Previously Presented), **claim 15** (dependent on claim 11, Previously Presented), **claim 16** (dependent on claim 12, Previously Presented) and **claim 17** (dependent on claim 13, Previously Presented), Kawabuchi et al. and Shimizu fail to explicitly disclose the management record unit storing the data to be processed in a condition of being encrypted.

The Examiner takes official notice that it is well known in the art to encrypt print data, specifically confidential data, in order to prevent leakage of such data. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to store print data in Kawabuchi et al. and Shimizu's system in an encrypted form in order to prevent leakage of such data.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL F. PAYER whose telephone number is (571) 270-7302. The examiner can normally be reached on Mon-Thu 6:15am-3:45pm, 2nd Fri of biweek 6:15am-2:45pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Q. Tieu can be reached on (571) 272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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